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- 1580 **Ultraviolet B Radiation-induced Skin Cancer in Mice Defective in the *Xpc*, *Trp53*, and *Apex (HAP1)* Genes: Genotype-specific Effects on Cancer Prevalence and Pathology of Tumors.** David L. Cheo, Louise B. Meira, Dennis K. Burns, Antonio M. Reis, Tony Isaac, and Errol C. Friedberg.

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- 1595 **Prognostic Significance of the Metastasis-inducing Protein S100A4 (p9Ka) in Human Breast Cancer.** Philip S. Rodan, Angela Platt-Higgins, Christine Renshaw, Christopher R. West, John H. R. Winstanley, Lynne Robertson, and Roger Barncroft.

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- 1604 **Peroxisome Proliferator-activated Receptor γ Ligands Inhibit Estrogen Biosynthesis in Human Breast Adipose Tissue: Possible Implications for Breast Cancer Therapy.** Gary L. Rubin, Ying Zhao, Allan M. Kahn, and Evan R. Simpson.

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- 1619 **Chromosomal Aberrations in Lymphocytes Predict Human Cancer Independently of Exposure to Carcinogens.** Stefano Bonassi, Lars Hagmar, Ulf Stromberg, Alicia Hara, Monica Menzaghi, Hilan Tannenber, Alessandra Forni, Papp Heikkilä, Salkia Wanders, Peter Willhardt, Inger-Lise Hansén, Lisbeth E. Knudsen, and Hanna Norppa, for the European Study Group on Cytogenetic Biomarkers and Health.

- 1626 **Association of *SRD5A2* Genotype and Pathological Characteristics of Prostate Tumors.** Julie M. Jaffe, S. Bruce Malkowicz, Amy H. Walker, Sam MacBride, Richard Preschel, John Tomaszewski, Keith Van Andelen, Alan J. Wein, and Timothy R. Rebbeck.

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- 1654 **Heterogeneous Expression of the SSX Cancer/Testis Antigens in Human Melanoma Lesions and Cell Lines.** Nuno R. dos Santos, Rauld Tereima, Teunis J. de Vries, Marco W. J. Schreurs, Diederik R. H. de Bruijn, Ellen Kater-Baas, Dirk J. Ruiter, Goeke J. Adema, Goois N. P. van Muijen, and Ad Geurts van Kessel.
- 1663 **Preclinical Evaluation of "Whole" Cell Vaccines for Prophylaxis and Therapy Using a Disabled Infectious Single Cycle-Herpes Simplex Virus Vector to Transduce Cytokine Genes.** S. A. Ali, C. S. McLean, M. E. G. Bourne, G. Martin, C. L. Holmes, S. Reeder, C. Entwistle, D. M. Blakeley, J. G. Shields, S. Todryk, R. Vile, R. A. Robins, and R. C. Rees.

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- 1677 **Identification of Differentially Expressed Genes in Human Prostate Cancer Using Subtraction and Microarray.** Juechuan Xu, John A. Sells, Xingping Zhang, Sandra J. Silva, Raymond L. Houghton, Masazumi Matsumura, Thomas S. Vedvick, Kevin B. Leslie, Roberto Badaoui, and Steven G. Reed.

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- 1800 **Relative Reciprocity of *NRAS* and *P1EN/MAC1* Alterations in Cutaneous Melanoma Cell Lines.** Hsien Tsao, Xue Zhang, Kianna Fowlkes, and Frank G. Haluska.

- 1805 **Cyclooxygenase-2, a Colorectal Cancer Neutroinflammatory Drug Target, Is Regulated by c-MYC.** Robert G. Ramsay, Annabel Friend, Yotta Visciano, Ruth Freeman, Catherine Scudella, Fleur Hammett, Jane Armes, and Deon Venter.

- 1810 **Estrogen Receptor Protects p53 from Deactivation by Human Double Minute-2.** Guozhen Liu, Janice A. Schwartz, and Sam C. Brooks.

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- 1690 **A 790-kb Physical Map of a Region of 16q23.2 Homozygously Deleted in Multiple Cancers and Spanning the Common Fragile Site *FRA16D*.** Adam J. W. Paige, Karen J. Taylor, Aengus Stewart, John G. Sgouras, Hani Gabra, Grant C. Sellar, John F. Smyth, David J. Porteous, and J. E. Vivienne Watson.

- 1698 **Somatic Mutation Rates and Specificities at TCA/G and GTCA Microsatellite Sequences in Nontumorigenic Human Lymphoblastoid Cells.** Suzanne E. Hile, Guang Yan, and Kristin A. Eckert.

- 1704 ***DMRT1* Encodes a Protein Involved in the Immune Defense and in Epithelial Differentiation and Is Highly Unstable in Cancer.** Jan Moltenhauer, Stephan Herbert, Uffe Holmikov, Markus Tolnay, Inge Krebs, Adrian Merlo, Henrik Daa Schröder, Daniel Maier, Frank Breitling, Stefan Wiemann, Hermann-Josef Gröne, and Anemarie Poustka.

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- 1720 **Both Normal and Transforming PCPH Proteins Have Guanosine Diphosphate Activity But Only the Oncoprotein Cooperates with Ras in Activating Extracellular Signal-regulated Kinase *EARK1*.** Juan A. Reicio, J. Guillermo Pérez, Basilia Markert, Mark Loveland, Juan A. Velasco, and Vicente Nizano.

- 1729 **Respective Roles of Cyclobutane Pyrimidine Dimers, (6-4)Photoproducts, and Minor Photoproducts in Ultraviolet Mutagenesis of Repair-deficient Xeroderma Pigmentosum A Cells.** Eriko Otsuki, Takashi Yagi, Toshio Mori, Tsukasa Matsunaga, Osamu Nishida, Sang-Tae Kim, Kenichi Hinomi, Mituo Benaga, and Takeshi Tado.

- 1736 **TSC101 Protein Steady-State Level Is Regulated Posttranslationally by an Evolutionarily Conserved COOH-Terminal Sequence.** Guo Hong Feng, Chih-Jian Lih, and Stanley N. Cohen.

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- 1742 **Effect of Cyclooxygenase and Nitric Oxide Synthase Inhibitors on Tumor Growth in Mouse Models with and without Cancer Cachexia Related to Prostanoids.** Christian Cahlin, Johan Gelin, Dick Delbro, Christina Lönnroth, Chiharu Doi, and Kent Lundholm.

- 1750 **Frequency and Prognostic Impact of Microsatellite Instability in a Large Population-based Study of Endometrial Carcinomas.** Nicola D. MacDonald, Helga B. Salvesen, Andrew Ryan, Ole-Erik Iversen, Lars A. Aalen, and Jan J. Jacobs.

- 1753 **Role of Mitogen-activated Protein Kinases in the Induction of Parathyroid Hormone-related Peptide.** Faisla Akhila, Julieanne Glau, David Goltzman, and Shafat A. Rabban.

- 1761 **Continuous Administration of Angiotensin Inhibits Accelerated Growth of Colorectal Liver Metastases after Partial Hepatectomy.** Tom A. Drisler, Inne H. M. Borel Rinkes, Ewan D. Ritchie, Theo J. M. V. van Vroomhoven, Marjolijn F. B. G. Gebbink, and Emile E. Voest.

- 1766 **Fas Drives Cell Cycle Progression in Glioma Cells via Extracellular Signal-regulated Kinase Activation.** Hisaki Shinohara, Hideo Yagita, Yoichi Ikawa, and Naoki Ohyama.

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- 1818 **Inhibitor of Apoptosis Protein b1P Undergoes Caspase-mediated Cleavage during T Lymphocyte Apoptosis.** Daniel E. Johnson, Brian R. Gastman, Eva Wackowski, Gui-Qiang Wang, Andrew Amencio, Scott M. Delach, and Hannah Rabinovich.

- 1824 **Identification of BP4 (TNFAIP2) as a Potential Retinoid Acid Target Gene in Cancer Promyelocytic Leukemia.** Michael E. Rasmussen, Min Yu, Douglas T. Ross, Erin C. Tolhurst, and James L. Slack.

- 1830 Oncogenic Base Substitution Mutations in Circulating Leukocytes of Normal Individuals. Vincent L. Wilson, Xiang Yin, Barbara Thompson, Kerry R. Wade, Jeremy P. Watkins, Qi Wei, and William R. Lee.
- 1835 Hypermethylation of Multiple Genes in Pancreatic Adenocarcinoma. Takashi Ueki, Minoru Toyota, Taylor Sobot, Charles J. Yeo, Jean-Pierre J. Issa, Ralph H. Hruban, and Michael Goggins.
- 1840 A Splice Variant of the Neuron-restrictive Silencer Factor Repressor Is Expressed in Small Cell Lung Cancer: A Potential Role in Desuppression of Neuroendocrine Genes and a Useful Clinical Marker. Judy M. Coulton, Jodie L. Edgson, Penella J. Wolf, and John P. Quinn.
- 1845 Nuclear Factor- κ B Activation Is Involved in LMP1-mediated Transformation and Tumorigenesis of Rat-1 Fibroblasts. Zhun He, Baosheng Xin, Xinhua Yang, Chang-ping Chai, and Liang Cao.

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- 1864 Chemopreventive Efficacy of Combined Proxodan and Dihydro-methylornithine Treatment of Apc Mutant Mice. Mousa Adenomon, and Selective Toxicity against Apc Mutant Embryos. Russell F. Jacoby, Carolyn E. Cole, Kendra Tusch, Michael A. Newton, Gary Kellhoff, Ernest T. Hawk, and Ronald A. Lubet.

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- 1871 A Phase I Trial of the Farnesyl Transferase Inhibitor SCH66336: Evidence for Biological and Clinical Activity. Alex A. Adjei, Charles Erickson, Jenny N. Davis, David L. Carter, Jeff A. Sloan, Randolph S. Marks, Lorelei J. Hanson, Phyllis A. Svingen, Pamela Atherton, W. Robert Bishop, Paul Kirschmeier, and Scott H. Kaufmann.

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- 1878 Antiangiogenic Scheduling of Chemotherapy Improves Efficacy against Experimental Drug-resistant Cancer. Timothy Browder, Catherine E. Butterfield, Birgit M. Kraling, Bin Shi, Blair Marshall, Michael S. O'Reilly, and Joshua Folkman.
- 1887 Adenosine-mediated Killing of Cultured Epithelial Cancer Cells. Catherine P. Barry and Stuart E. Lind.
- 1895 Antileukemic Activity of Fli3 Ligand in Murine Leukemia. Abing Wang, Stephen E. Braun, Guri Sonpavde, and Kenneth Cornetta.

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- 1901 Anthracyclines Trigger Apoptosis of Both G₀-G₁ and Cycling Peripheral Blood Lymphocytes and Induce Massive Deletion of Mature T and B Cells. Carole Ferraro, Laurence Quenecen, Anne-France Piguet, Catherine Taverne, Jean-Pierre Revillard, and Nathalie Bonney-Berard.

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- 2681 Fli3-Ligand Induces Transient Tumor Regression in an Ectopic Treatment Model of Major Histocompatibility Complex-negative Prostate Cancer. Richard P. Cuvare, Kenneth D. Sonzogni, Roy E. Brown, William F. Glaz, Patricia J. deAngelis, Conrado, George L. Wright, and Paul F. Schellhammer.
- 2685 Salivary and Exfoliated Exhibit a Significant Antiproliferative Effect and Induce Apoptosis in Human Hepatocellular Carcinoma Cell Lines. Md Atiqur Rahman, Dipak Kumar Dhar, Reiko Masunaga, Akira Yamanoi, Hitoshi Kohno, and Naofumi Nagase.
- 2690 Identification of a Geldanamycin Dimer That Induces the Selective Degradation of HER-Family Tyrosine Kinases. Fuzhong F. Zheng, Scott D. Kudak, Gabriela Chiossi, Pamela N. Münster, Laura Sepp-Lorenzini, Samuel J. Danishefsky, and Neil Rosen.
- 2695 Regulation of TCL1 Expression in B- and T-Cell Lymphomas and Reactive Lymphoid Tissues. Maria Grazia Narducci, Edoardo Pescamona, Cristina Lazzeri, Sabina Signorelli, Anna Maria Levanni, Daniele Romoni, Eranio Scali, Carlo David Baroni, Antonella Stroppiana, Carlo Maria Croce, and Giandomenico Russo.
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- 2708 The Radiosensitizing Agent 7-Hydroxystaurosporine (UCN-01) Inhibits the DNA Damage Checkpoint Kinase hChk1. Encka C. Busby, Dev F. Lestritz, Robert T. Abraham, Larry M. Karnitz, and Jan N. Sarkaria.
- 2713 Alterations of the INK4a/ARF Locus in Human Intracranial Germ Cell Tumors. Masayuki Iwata, Osamu Tachibana, Yasuo Tokita, Yasuki Arakawa, Hisashi Nitta, Mitsuhito Hasegawa, Junko Yamashita, and Yutaka Hayashi.

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- 1942 VIII. Alterations in Human Clear Cell Renal Cell Carcinoma: Association with Advanced Tumor Stage and a Novel Hot Spot Mutation. Hilbert Bruch, Gregor Weisch, Jürgen Bringer, Damjan Glavac, Heinz Rodl, Mariela Eisinger, Matthias Feurer, Eberhard Weich, Christos Papanikolaou, Christine Neuhans, Michael Pomer, Walburga Brenner, Peter Scharmacher, Stephan Stöckel, Michael Rötter, Andrej Malers, Nadja Guegler, and Hans-Joachim Decker.

- 1949 High Resolution Chromosome 3p Allelotyping of Human Lung Cancer and Preneoplastic/Preinvasive Bronchial Epithelium Reveals Multiple, Discontinuous Sites of 3p Allele Loss and Three Regions of Frequent Breakpoints. Ignacio I. Wistuba, Carmen Behre, Arvid K. Vranas, Gina Mele, Sara Michigros, Luc Girard, John W. Fontana III, Harold R. Garner, Bruce McKay, Farida Latif, Michael I. Lerman, Stephen Lam, Ali F. Gazdar, and John D. Minna.

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- 1974 Mutations in the XPC Gene in Families with Xeroderma Pigmentosum and Consequences at the Cell, Protein, and Transcript Levels. Franz Chavanne, Bernard C. Broughton, Daniela Peters, Tiziana Nardo, Alison Browett, Alan R. Lehmann, and Maria Stefanini.

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- 1995 Expression of Metallothionein II in Intestinal Metaplasia, Dysplasia, and Gastric Cancer. Mathias P. A. Bient, Michael G. Gieseler, Thomas Gieseler, Jun Yu, Stephan Michlitz, Hans U. Scholz, Albert Rössner, Murray Konec, and Peter Malfenheier.

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- 2128 Irradiation of a Primary Tumor, Unlike Surgical Removal, Enhances Angiogenesis Suppression at a Distal Site: Potential Role of Host-Tumor Interaction. Alan C. Hartford, Takeshi Gohongi, Dai Fukumura, and Rakesh K. Jain.

- 2132 Interleukin 6 Activates Androgen Receptor-mediated Gene Expression through a Signal Transducer and Activator of Transcription 3-dependent Pathway in LNCaP Prostate Cancer Cells. Tiansheng Chen, Li Hua Wang, and William L. Farrar.

- 2136 cdk2, a Target Antagonist of Naturally Occurring Human Tumor Immunity, Is Widely Expressed in Glioblastoma Tumors. Jennifer C. Darnell, Matthew L. Albert, and Robert B. Darnell.

- 2140 WWOX, a Novel WW Domain-containing Protein Mapping to Human Chromosome 16p23.3-24.1, a Region Frequently Affected in Breast Cancer. Andrzej K. Bodnar, Kendra J. Laflin, Rachael L. Daniel, Quanyin Liao, Kathleen A. Hawkins, and C. Marcello Aldaz.

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- 2152 Prognosis of Primary Testicular Seminoma: A Report on 57 New Cases. Kenta Fujikawa, Yoshiyuki Matsui, Hiroya Oka, Shigeki Fukuzawa, Miharu Sasaki, and Hideo Takenaka.

- 2002 Loss of Expression of Dpc4 in Pancreatic Intraepithelial Neoplasia: Evidence That DPC4 Inactivation Occurs Late in Neoplastic Progression. Robb E. Wilentz, Christine A. Jacobian-Douglas, Pedram Argani, Doro M. McCarthy, Jennifer L. Parsons, Charles J. Yeo, Scott E. Kern, and Ralph H. Hruban.

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- 2025 S-phase Arrest and Apoptosis Induced in Normal Mammary Epithelial Cells by a Novel Retinoid. Yuxiang Zhang, Ann K. Rodi, Marcus I. Denison, Randolph Tschang, Laila Farina, Madanmohan Boparappalli, Uwe Reichert, Brahm Shroet, Eric C. Van Buren, and Joseph A. Fontana.

- 2033 Fibroblast Assembly, Secretion, and Deposition into Extracellular Matrix by MCF-7 Human Breast Carcinoma Cells. Brian J. Rybarczyk and Patricia J. Simpson-Hadley.

- 2040 1,25-Dihydroxyvitamin D₃ and All-trans-Retinoic Acid Sensitize Breast Cancer Cells to Chemotherapy-induced Cell Death. Qin Wang, Wen Yang, Myrna S. Uytendaele, Sylvia Christakos, and Robert Wides.

- 2049 BCR-ABL Tyrosine Kinase Activity Regulates the Expression of Multiple Genes Implicated in the Pathogenesis of Chronic Myeloid Leukemia. Michael W. N. Deininger, Sara Viera, Rezzelle Mendicino, Beate Schuthof, John M. Goldman, and Junia V. Melo.

- 2056 Glucocorticoid Receptor Gene Mutations in Leukemic Cells Acquired *In Vivo* and *In Vitro*. Andrew G. Hillmann, Jyoti Ramesh, Kersi Mukherjee, Michael R. Norman, and Jeffrey M. Harmon.

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- 2178 PTX787/ZK 228384, a Novel and Potent Inhibitor of Vascular Endothelial Growth Factor Receptor Tyrosine Kinases, Inhibits Vascular Endothelial Growth Factor-induced Responses and Tumor Growth after Oral Administration. Jeanette M. Wood, Odo Bold, Elizabeth Buchdinger, Robert Cuzzes, Stefano Ferrari, Jörg Frei, Francesco Hoffmann, Jürgen Meissner, Helmut Mott, Terence O'Reilly, Elke Persohn, Johannes Rösel, Christian Scheld, David Slover, Andreas Thuermer, Harry Towbin, Fritz Wenger, Kathie Woods-Cavall, Andreas Monreal, Gerhard Stenzler, Michael Schmitt, Karl-Heinz Therasch, Martin R. Schneider, Joachim Dreys, Gerd Schürer-Baron, Frank Titzke, and Dieter Marmè.

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- 2197 Epidermal Growth Factor-mediated Targeting of Cholesterols Selectively Potentiates Its Photodynamic Activity. Anton Gjigjic, Ludwig Misslitz, Wilfried Merfeld, and Peter de Witte.

- 2203 E-7860 (B-Fluoriprefen) Inhibits Progression of Prostate Cancer in the TRAMP Model. William J. Wechter, Douglas D. Leopold, E. David Murray, Jr., David Quiggle, John D. McCracken, S. Barrios, and Norman M. Greenberg.

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- 2218 **Immune Deviation and Fas-mediated Deletion Limit Antitumor Activity after Multiple Dendritic Cell Vaccinations in Mice.** Anonli Ribas, Lisa H. Butterfield, Billy Hu, Vivian B. Dusette, Wilson S. Meng, Andrew Koh, Kahli J. Andrews, Maggie Lee, Saral N. Amar, John A. Glusky, William H. McBride, and James S. Economou.

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- 2225 **BMSH6 Alterations in Patients with Microsatellite Instability-Low Colorectal Cancer.** Yan R. Parc, Kevin C. Halling, Liang Wang, Eric R. Christensen, Julie M. Cunningham, Amy J. French, Lawrence J. Burgart, Tammy L. Price-Troxka, Patrick C. Roche, and Stephen N. Thibodeau.
- 2232 **Linking Gene Expression Patterns to Therapeutic Groups in Breast Cancer.** Katherine J. Martin, Brian M. Kitzman, Laura M. Price, Brian Koh, Chi-Pong Kwan, Xiaohong Zhang, Alan Mackay, Michael J. O'Hare, Carolyn M. Kaelin, George L. Mutter, Arthur B. Pardee, and Ruth Sagor.
- 2239 **The Normal patched Allele Is Expressed in Medulloblastomas from Mice with Heterozygous Germ-Line Mutation of patched.** Cynthia Wetmore, Derek E. Eberhart, and Tom Curran.
- 2247 **Ubiquitin/Proteasome Pathway Regulates Levels of Retinoic Acid Receptor γ and Retinoid X Receptor β in Human Keratinocytes.** Mohamed Boudjeld, Zenguan Wang, John J. Voorhees, and Gary J. Fisher.

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A. Eberhard *et al.*, 60: 1388–1393, 2000.
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H. Fukazawa and Y. Uehara, 60: 2104–2107, 2000.

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S. Kang et al., 60: 5296-5302, 2000.
V. V. Leventon (Chernobyl) et al., 60: 5027-5030, 2000.
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Corrections

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Cover Illustrations for Volume 60

January 1: Frank J. Rauscher, III, who assumed the Editorship of *Cancer Research* effective January 1, 2000.

January 15: Recipients of the 1999 General Motors Cancer Research Foundation Prizes: Ronald Levy, Arnold J. Levine, Robert G. Roeder, and Robert Tjian.

February 1: The 91st AACR Annual Meeting, April 1-5, 2000, San Francisco, CA.

February 15: The Burnham Institute, an independent, non-profit research institute in La Jolla, CA, which is headed by Erkki Ruoslahti.

March 1: Commemorative stamp featuring Percy Lavon Julian, a biomedical scientist and the first African American to lead a major multiethnic research enterprise.

March 15: Recipients of the annual awards of the AACR: Charles J. Sherr, Elizabeth H. Blackburn, Edison Tak-Bun Liu, Waun Ki Hong, Nikola P. Pavletich, John D. Potter, Axel Ullrich, Walter C. Willet, and Leona D. Samson.

April 1: Errol C. Friedberg, who is internationally recognized as the premier investigator in the field of DNA repair.

April 15: Margaret Foti, Chief Executive Officer of AACR, recognized for her receipt of the Cino del Duca and the Ville de Paris Awards in Paris.

May 1: The University of California, San Francisco (UCSF) Comprehensive Cancer Center, which received the comprehensive designation from NCI, based on the high collaborative degree to which the Cancer Center integrated basic, clinical, and population sciences.

May 15: Larry W. Oberley, whose interdisciplinary research has spanned the fields of physics, nuclear medicine, radiation biology, cancer biology, and free radical biology.

June 1: The AACR Educational Workshop "Molecular Biology in Clinical Oncology," which has been funded annually by a grant from the National Cancer Institute to increase young clinical oncologists' basic knowledge of molecular biology concepts and techniques.

June 15: Recipients of the 2000 General Motors Cancer Research Foundation Prizes: Monroe Wall, Mansukh Wani, Bert Vogelstein, Avram Herskho, and Alexander Varshavsky.

July 1: Peter Noel Magee, former Editor-in-Chief of *Cancer Research* (1980-1989) and honorary member of the AACR, who will be remembered for his pioneering discovery of the carcinogenicity of *N*-nitrosamines and their mechanism of action.

July 15: Recipients of the 23rd annual Bristol-Myers Squibb Award for Distinguished Achievement in Cancer Research: David Beach and Charles J. Sherr.

August 1: David Platt Rall, who was a pioneer in public health policy and environmental health issues.

August 15: Robert F. Ozols, who has made important contributions in the area of translational studies in epithelial ovarian cancer.

September 1: Sir James Paget (1814-1899), who was a master of clinical diagnosis and gross tumor pathology at the dawn of surgical pathology.

September 15: David Tarin, Director of the Cancer Center at the University of California, San Diego (UCSD).

October 1: James German, who established the Bloom's Syndrome Registry, a valuable model for research in the etiology of human cancer.

October 15: Takis Papas, who will be remembered for his work in the field of molecular oncology, most notably for affirming the critical action of the *myc* oncogene as an efficient cause of cancer in vertebrates.

November 1: Audrey Elizabeth Evans, whose major interest has been and remains the study of neuroblastoma, the most common of the solid childhood cancers.

November 15: The Ohio State University Comprehensive Cancer Center, directed by Clara D. Bloomfield, which celebrates the 25th anniversary of its designation as a comprehensive cancer center and the 10th anniversary of the opening of its major clinical arm, the Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (The James), directed by David E. Schuller.

December 1: The 92nd AACR Annual Meeting, March 24-28, 2001, New Orleans, LA.

December 15: Tom Curran, AACR President (2000-2001), whose identification and characterization of the *Fos* gene and protein has had an enduring impact on the fields of virology, molecular oncology, and neurobiology.





